

# Rodrigo S Targino

Curriculum Vitae  
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## Education

|      |                            |   |                        |
|------|----------------------------|---|------------------------|
| 2017 | PhD in Statistics          | University College London (UCL)             | London, UK             |
| 2010 | MSc in Statistics          | Federal University of Rio de Janeiro (UFRJ) | Rio de Janeiro, Brazil |
| 2007 | BSc in Applied Mathematics | Federal University of Rio de Janeiro (UFRJ) | Rio de Janeiro, Brazil |

## Employment

|           |   |                        |
|-----------|---|------------------------|
| 2017–     | <b>Assistant Professor</b> , School of Applied Mathematics (EMAp),<br>Getulio Vargas Foundation (FGV) | Rio de Janeiro, Brazil |
| 2011–2012 | <b>Market Risk Analyst</b> , Credit Suisse Hedging Griffo   | São Paulo, Brazil      |
| 2010–2011 | <b>Credit Risk Analyst</b> , Itaú-Unibanco Bank   | São Paulo, Brazil      |

## Teaching experience

|                 |                             |     |      |
|-----------------|-----------------------------|-----|------|
| 2017–2018       | Probability                 | BSc | FGV  |
| 2017–2018       | Statistics                  | BSc | FGV  |
| 2017–2018, 2020 | Statistics and Econometrics | MSc | IMPA |
| 2018–2019       | Statistics                  | MSc | FGV  |
| 2019, 2021      | Machine Learning            | BSc | FGV  |
| 2019–2021       | Probability                 | MSc | FGV  |
| 2020–2021       | Machine Learning            | MSc | FGV  |
| 2020            | Statistics and Econometrics | BSc | FGV  |

## Academic supervisions

### PhD

2019– Marcus Gerardus Lavagnole Nascimento UFRJ

### MSc

|           |                                 |      |
|-----------|---------------------------------|------|
| 2020–     | Luiz Fernando G. N. Maia        | FGV  |
| 2019–     | Hugo Barreto                    | FGV  |
| 2019–     | Christiano Lo Bianco Clementino | IMPA |
| 2019–2020 | Pedro Medeiros Teixeira         | FGV  |
| 2019–2020 | Marcelo Orgler                  | FGV  |
| 2018–2019 | Lucas Paiva de Carvalho         | IMPA |
| 2018–2019 | João Marcos Amorim dos Santos*  | FGV  |
| 2018–2019 | Yuri Resende Fonseca*           | IMPA |
| 2017–2018 | Renan Lima Novais*              | FGV  |

### BSc

|           |                              |     |
|-----------|------------------------------|-----|
| 2021–     | Vitoria Mesquita Leite       | FGV |
| 2019–2020 | Matheus Borghi               | FGV |
| 2017–2017 | Paulo de Tarso Silva Santos* | FGV |
| 2016–2016 | Helder Rezende*              | FGV |

(\*) Second supervisor

## Editorial activity

2021– Associate Editor Brazilian Review of Finance (RBFIn)

## Refereeing services

### Journals

Risks, Journal of Risk and Financial Management, Computation and Applied Mathematics, Brazilian Review of Econometrics, ASTIN Bulletin, Journal of Banking and Finance, Sustainability, Quantitative Finance, Revista Contabilidade & Finanças, Brazilian Review of Finance, International Journal of Forecasting, Applied Stochastic Models in Business and Industry, Computational Statistics

## Funding agencies

Natural Sciences and Engineering Research Council of Canada, Czech Science Foundation

## Research visits

|      |                    |                             |
|------|--------------------|-----------------------------|
| 2019 | Samuel Livingstone | UCL, UK                     |
| 2019 | Emmanuel Gobet     | École Polytechnique, France |
| 2014 | Pavel Shevchenko   | CSIRO, Australia            |
| 2014 | Mario Wüthrich     | ETH, Switzerland            |
| 2013 | Pavel Shevchenko   | CSIRO, Australia            |

## Publications

### Refereed research papers

1. Nieto-Barajas, L. E., & Targino, R. S. (2021). A gamma moving average process for modelling dependence across development years in run-off triangles. *ASTIN Bulletin: The Journal of the IAA*, 51(4), 245–266. <https://doi.org/http://doi.org/10.1017/asb.2020.36>
2. Merkle, M., Saporito, Y. F., & Targino, R. S. (2020). Bayesian approach for parameter estimation of continuous-time stochastic volatility models using fourier transform methods. *Statistics & Probability Letters*, 156, 108600. <https://doi.org/https://doi.org/10.1016/j.spl.2019.108600>
3. Peters, G. W., Targino, R. S., & Wüthrich, M. V. (2017). Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. *Risks*, 5(4), 53. <https://doi.org/https://doi.org/10.3390/risks5040053>
4. Targino, R. S., Peters, G. W., Sofronov, G., & Shevchenko, P. V. (2017). Optimal exercise strategies for operational risk insurance via multiple stopping times. *Methodology and Computing in Applied Probability*, 19(2), 487–518. <https://doi.org/http://dx.doi.org/10.1007/s11009-016-9493-8>
5. Peters, G. W., Targino, R. S., & Wüthrich, M. V. (2017). Full bayesian analysis of claims reserving uncertainty. *Insurance: Mathematics and Economics*, 73, 41–53. <https://doi.org/http://dx.doi.org/10.1016/j.insmatheco.2016.12.007>
6. Targino, R. S., Peters, G. W., & Shevchenko, P. V. (2015). Sequential monte carlo samplers for capital allocation under copula-dependent risk models. *Insurance: Mathematics and Economics*, 61, 206–226. <https://doi.org/https://doi.org/10.1016/j.insmatheco.2015.01.007>
7. Peters, G. W., Targino, R. S., & Shevchenko, P. V. (2013). Understanding operational risk capital approximations: First and second orders. *The Journal of Governance and Regulation*, 2(3). [https://doi.org/https://doi.org/10.22495/jgr\\_v2\\_i3\\_p6](https://doi.org/https://doi.org/10.22495/jgr_v2_i3_p6)

### Working papers under revision or review

1. Evangelista, D., Saporito, Y. F., & Targino, R. S. (2021). *Uma análise do risco de fundos de ações brasileiros em 2020*. <https://papers.ssrn.com/abstract=3825680>
2. Saporito, Y. F., & Targino, R. S. (2020). *Avoiding zero probability events when computing value at risk contributions: A malliavin calculus approach*. <https://arxiv.org/abs/2004.13235>
3. Duarte, D., Saporito, Y. F., & Targino, R. S. (2018). *The impact of the freedom of the press on risk*. <https://dx.doi.org/10.2139/ssrn.3218754>

## Academic presentations

1. Avoiding zero probability events when computing value at risk allocations. (2021). *24th International Congress on Insurance: Mathematics and Economics*. [https://www.dropbox.com/s/czqfnqsu9hlwwf9/20210616\\_short.pdf?dl=0](https://www.dropbox.com/s/czqfnqsu9hlwwf9/20210616_short.pdf?dl=0)
2. Risk budgeting portfolios from simulations. (2021). *3rd Insurance Data Science Conference*. [https://www.dropbox.com/s/czqfnqsu9hlwwf9/20210616\\_short.pdf?dl=0](https://www.dropbox.com/s/czqfnqsu9hlwwf9/20210616_short.pdf?dl=0)
3. Transform MCMC schemes for sampling intractable factor copula models. (2021). *RESIM 2021 : 13th International Workshop on Rare-Event Simulation*. [https://www.dropbox.com/s/7bphf9w4h5wobdd/Slides-Targino\\_RESIM-May2021.pdf?dl=0](https://www.dropbox.com/s/7bphf9w4h5wobdd/Slides-Targino_RESIM-May2021.pdf?dl=0)
4. The economic uncertainty index: The brazilian case, its relations with the freedom of the press and new estimation methods. (2020). *School of Economics USP-RP*. [https://www.dropbox.com/s/iz7w495qe5xknpz/slides\\_FOTP.pdf?dl=0](https://www.dropbox.com/s/iz7w495qe5xknpz/slides_FOTP.pdf?dl=0)
5. Round table on the job market for data scientistis. (2020). *3ª Semana Da Engenharia Matemática e Matemática Aplicada Da UFRJ*. <https://youtu.be/ennu0cEwBLI?t=27639>
6. Avoiding zero probability events when computing value at risk allocations. (2020). *One World Actuarial Research Seminar (OWARS)*. [https://www.dropbox.com/s/qvas8cglqn8s16l/slides\\_Euler\\_Malliavin.pdf?dl=0](https://www.dropbox.com/s/qvas8cglqn8s16l/slides_Euler_Malliavin.pdf?dl=0)

7. Understanding economic policy uncertainty index using semi-automatic news classification. (2020). *Encontro Brasileiro de Estatística Bayesiana (EBEB)*, Maresias, Brazil. [https://www.dropbox.com/s/lvvb6wvs230o8n9/EPU\\_particle\\_filters.pdf?dl=0](https://www.dropbox.com/s/lvvb6wvs230o8n9/EPU_particle_filters.pdf?dl=0)
8. Understanding economic policy uncertainty index using semi-automatic news classification. (2019). *École Polytechnique, Paris, France*. [https://www.dropbox.com/s/1fujxpi3it6r09j/EPU\\_particle\\_filters.pdf?dl=0](https://www.dropbox.com/s/1fujxpi3it6r09j/EPU_particle_filters.pdf?dl=0)
9. Understanding economic policy uncertainty index using semi-automatic news classification. (2019). *4th International Workshop in Financial Econometrics\**, Maceió, Brazil.
10. Understanding economic policy uncertainty index using semi-automatic news classification. (2019). *Escola de Séries Temporais e Econometria, Gramado, Brazil*.
11. Understanding economic policy uncertainty index using semi-automatic news classification. (2019). *Workshop on Stochastic Simulation Methods in Statistics, Rio de Janeiro, Brazil*.
12. Understanding economic policy uncertainty index using semi-automatic news classification. (2019). *Universidade Federal de Santa Catarina (UFSC), Florianópolis, Brazil*.
13. The impact of the freedom of the press on risk. (2019). *SIAM Conference on Financial Mathematics & Engineering, Toronto, Canada*. <https://www.dropbox.com/s/u77t1n25hk3rqop/News.pdf?dl=0>
14. The impact of the freedom of the press on risk. (2019). *Universidade Federal Do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil*.
15. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2019). *3rd International Congress on Actuarial Science and Quantitative Finance, Manizales, Colombia*. <https://www.dropbox.com/s/zzq149agokfgqkj/RiskMargin.pdf?dl=0>
16. Prediction of the volatility surface with generalized autoregressive score (GAS) models. (2018). *Congresso Nacional de Matemática Aplicada e Computacional (CNMAC), Campinas, Brazil*.
17. The impact of the freedom of the press on risk. (2018). *33 Foro Nacional de Estadística (FNE) y 13 Congreso Latinoamericano de Sociedades de Estadística (CLATSE), Guadalajara, Mexico*. [https://www.dropbox.com/s/34rp3qqhmk8iitp/slides\\_FOTP.pdf?dl=0](https://www.dropbox.com/s/34rp3qqhmk8iitp/slides_FOTP.pdf?dl=0)
18. The impact of the freedom of the press on risk. (2018). *Workshop in Econometrics, São Paulo, Brazil*.
19. Efficient monte carlo algorithms for risk allocation. (2018). *Research in Options (RiO), Rio de Janeiro, Brazil*. <https://www.youtube.com/watch?v=xm0is0DxSoE>
20. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2018). *Simpósio Nacional de Probabilidade e Estatística, São Pedro, Brazil*.
21. Realistic risk parity portfolios. (2017). *3rd International Workshop in Financial Econometrics\**, Arraial d'Ajuda, Brazil.
22. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2017). *31st Brazilian Mathematical Colloquium, Rio de Janeiro, Brazil*.
23. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2017). *UCT - Mid-Challenge Workshop in Financial Mathematics, Cape Town, South Africa*.
24. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2017). *Universidade Federal Do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil*.
25. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2017). *Instituto Nacional de Matemática Pura e Aplicada, Rio de Janeiro, Brazil*.
26. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2016). *3rd Workshop on Assessment of Risk (WAR)\*, São Paulo, Brazil*.
27. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2016). *Research in Options (RiO), Rio de Janeiro, Brazil*. [https://www.youtube.com/watch?v=toqA3\\_v8Kfs&t=3961s](https://www.youtube.com/watch?v=toqA3_v8Kfs&t=3961s)
28. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2016). *Fundação Getulio Vargas, Rio de Janeiro, Brazil*.
29. Bayesian modelling, monte carlo sampling and capital allocation of insurance risks. (2016). *Cass Business School, London, United Kingdom*.
30. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2015). *Christmas Workshop on Sequential Monte Carlo and Related Methods, London, UK*.
31. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2015). *Sequential Monte Carlo Workshop\*, Paris, France*.
32. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2015). *Congress on Insurance: Mathematics and Economics, Liverpool, UK*.
33. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2015). *Universidade Federal Do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil*.

34. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2014). *University of New South Wales (UNSW), Sydney, Australia.*
35. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2014). *Research Students Conference, Nottingham, United Kingdom.*
36. Sequential monte carlo samplers for capital allocation under copula-dependent risk models. (2014). *Monte Carlo and Quasi Monte Carlo (MCQMC), Leuven, Belgium.*
37. Optimal exercise strategies for operational risk insurance via multiple optimal stopping times. (2013). *Universidade Federal Do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil.*
38. (2013). *CFE-ERCIM, London, United Kingdom.*
39. (2013). *Macquarie University, Sydney, Australia.*
40. Hedging in incomplete markets using fourier series method. (2009). *Research In Options\*, Búzios, Brazil.*
41. Applications of the fractional brownian motion in finance. (2009). *XIII Brazilian School of Probability\*, Maresias, Brazil.*
42. Estimation of the parameters of the heston model by fourier series method. (2009). *13a Escola de Séries Temporais e Econometria, São Carlos, Brazil.*
43. Calibration of the heston model by fourier series method. (2009). *Fourth Brazilian Conference on Statistical Modelling in Insurance and Finance, Maresias, Brazil.*
44. Bayesian selection for heston models with volatilities determined by fourier series method. (2008). *Research In Options (RiO)\*, Angra Dos Reis, Brazil.*

(\*) Poster presentations.